# Chemical Safety Data Sheet MSDS / SDS

# 4-Chloro-6-ethyl-5-fluoropyrimidine

Revision Date:2024-08-24 Revision Number:1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### **Product identifier**

| Product name  | : 4-Chloro-6-ethyl-5-fluoropyrimidine  |  |  |  |  |
|---|--|--|--|--|--|
| CBnumber  | : CB4709862  |  |  |  |  |
| CAS   | : 137234-74-3  |  |  |  |  |
| EINECS Number   | : 604-010-1  |  |  |  |  |
| Synonyms  | : 4-CHLORO-6-ETHYL-5-FLUOROPYRIMIDINE  |  |  |  |  |
| Relevant identified uses of the substance or mixture and uses advised against |  |  |  |  |  |
| Relevant identified uses  | : For R&D use only. Not for medicinal, household or other use.   |  |  |  |  |
| Uses advised against  | : none   |  |  |  |  |
| Company Identification  |  |  |  |  |  |
| Company   | : Chemicalbook   |  |  |  |  |
| Address   | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing                             |  |  |  |  |
| Telephone   | : 400-158-6606   |  |  |  |  |
| Uses advised against<br>Company Identification<br>Company<br>Address          | : none<br>: Chemicalbook<br>: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing |  |  |  |  |

# SECTION 2: Hazards identification

### Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Skin sensitization, Category 1

### Label elements

### Pictogram(s)

Signal word

Warning

### Hazard statement(s)

H227 Combustible liquid

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

### Precautionary statement(s)

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Chemical Book

#### Continuerinsing.

P405 Store locked up.

### Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

#### Response

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P333+P317 If skin irritation or rash occurs: Get medical help.

P321 Specific treatment (see ... on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

### Storage

none

### Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### Other hazards

no data available

### SECTION 3: Composition/information on ingredients

### Substance

| Product name | : 4-Chloro-6-ethyl-5-fluoropyrimidine |
|--------------|---------------------------------------|
| Synonyms     | : 4-CHLORO-6-ETHYL-5-FLUOROPYRIMIDINE |
| CAS          | : 137234-74-3                         |
| EC number    | : 604-010-1                           |
| MF           | : C6H6CIFN2                           |
| MW           | : 160.58                              |
|              |                                       |

### SECTION 4: First aid measures

### Description of first aid measures

### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately.

Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### Most important symptoms and effects, both acute and delayed

no data available

### Indication of any immediate medical attention and special treatment needed

no data available

# **SECTION 5: Firefighting measures**

### **Extinguishing media**

Use dry chemical, carbon dioxide or alcohol-resistant foam.

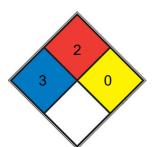
### **Specific Hazards Arising from the Chemical**

no data available

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### **NFPA 704**



| HEALTH        | 3 | Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid, calcium</u> <u>hypochlorite</u> , hexafluorosilicic acid)   |  |
|---------------|---|---|--|
| FIRE          | 2 | Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, <u>sulfur</u> ) |  |
| REACT         | 0 | Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)  |  |
| SPEC.<br>HAZ. |   |   |  |

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## SECTION 7: Handling and storage

### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

### SECTION 8: Exposure controls/personal protection

### **Control parameters**

### **Occupational Exposure limit values**

no data available

Biological limit values

no data available

#### **Exposure controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

### Individual protection measures

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The

selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

no data available

# SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

| Odourno data availableMelting point/freezing pointno data availableBoiling point or initial boiling point and<br>boiling range211°CFlammabilityno data availableLower and upper explosionno data availableIimit/flammability limitno data availableFlash point81°CAuto-ignition temperatureno data availableDecomposition temperatureno data availableIpHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative densityno data available   | Physical state                             | Oil                             |
|---|--|---------------------------------|
| Melting point/freezing point     no data available       Boiling point or initial boiling point and<br>boiling range     211°C       Flammability     no data available       Lower and upper explosion     no data available       Lower and upper explosion     no data available       Imit/flammability limit     no data available       Flash point     81°C       Auto-ignition temperature     no data available       per point     no data available       poorposition temperature     no data available       pH     no data available       Kinematic viscosity     no data available       Solubility     no data available       Partition coefficient n-octanol/water     no data available       Vapour pressure     0.272mmHg at 25°C       Density and/or relative density     1.286       Relative vapour density     no data available | Colour                                     | Clear Colourless to Pale Yellow |
| Boiling point or initial boiling point and boiling point and boiling range   211°C     Flammability   no data available     Lower and upper explosion   no data available     Lower and upper explosion   no data available     Imit/flammability limit   | Odour                                      | no data available               |
| boiling range<br>Flammability int no data available<br>Lower and upper explosion no data available<br>limit/flammability limit<br>Flash point 81°C<br>Auto-ignition temperature no data available<br>Decomposition temperature no data available<br>Decomposition temperature no data available<br>pH no data available<br>Kinematic viscosity no data available<br>Solubility Chloroform, Ethyl Acetate<br>Partition coefficient n-octanol/water no data available<br>Vapour pressure 0.272mmHg at 25°C<br>Density and/or relative density 1.286<br>Relative vapour density no data available  | Melting point/freezing point               | no data available               |
| Flammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point81°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative densityno data availableNeater availableno data availableNeater availableno data availableSolubility0.4272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available  | Boiling point or initial boiling point and | 211°C                           |
| Lower and upper explosionno data availablelimit/flammability limit81°CFlash point81°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available   | boiling range                              |                                 |
| Iimit/flammability limitFlash point81°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available   | Flammability                               | no data available               |
| Flash point81°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableno data availableno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative densityno data availableRelative vapour densityno data available   | Lower and upper explosion                  | no data available               |
| Auto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available  | limit/flammability limit                   |                                 |
| Decomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available  | Flash point                                | 81°C                            |
| pHno data availableKinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available  | Auto-ignition temperature                  | no data available               |
| Kinematic viscosityno data availableSolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available   | Decomposition temperature                  | no data available               |
| SolubilityChloroform, Ethyl AcetatePartition coefficient n-octanol/waterno data availableVapour pressure0.272mmHg at 25°CDensity and/or relative density1.286Relative vapour densityno data available   | рН   | no data available               |
| Partition coefficient n-octanol/water   no data available     Vapour pressure   0.272mmHg at 25°C     Density and/or relative density   1.286     Relative vapour density   no data available   | Kinematic viscosity                        | no data available               |
| Vapour pressure   0.272mmHg at 25°C     Density and/or relative density   1.286     Relative vapour density   no data available   | Solubility                                 | Chloroform, Ethyl Acetate       |
| Density and/or relative density 1.286   Relative vapour density no data available   | Partition coefficient n-octanol/water      | no data available               |
| Relative vapour density no data available   | Vapour pressure                            | 0.272mmHg at 25°C               |
|   | Density and/or relative density            | 1.286                           |
| Particle characteristics no data available  | Relative vapour density                    | no data available               |
|   | Particle characteristics                   | no data available               |

# SECTION 10: Stability and reactivity

### Reactivity

no data available

### **Chemical stability**

no data available

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

### Hazardous decomposition products

no data available

# SECTION 11: Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### **Reproductive toxicity**

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

# SECTION 12: Ecological information

### Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### Other adverse effects

no data available

### **SECTION 13: Disposal considerations**

### **Disposal methods**

### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

### **SECTION 14: Transport information**

### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

### **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

### Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

### Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

### **Environmental hazards**

ADR/RID: No IMDG: No IATA: No

### Special precautions for user

no data available

### Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

### Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Not Listed.

EC Inventory

Not Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Not Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Not Listed.

PICCS

Not Listed.

Vietnam National Chemical Inventory

Not Listed.

IECSC

Not Listed.

Korea Existing Chemicals List (KECL)

Not Listed.

### **SECTION 16: Other information**

Abbreviations and acronyms

#### CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?

pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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